

[0051] FIGS. 5-19 show and describe additional embodiments of accessory devices. Although not all structures, features, and functions are explicitly described, the accessory devices shown and described in FIGS. 5-19 may include several (and in some cases, all) components and associated features shown and described for the accessory device 100 in FIGS. 1 and 2. Further, the accessory devices shown and described in FIGS. 5-19 can be used with the electronic device 170 shown in FIGS. 3 and 4.

[0052] FIG. 5 illustrates a front isometric view of an alternate embodiment of an accessory device 200, showing the accessory device 200 with a connector 236, in accordance with some described embodiments. The accessory device 200 includes a receptacle 202 designed to receive and carry an electronic device (not shown in FIG. 5). The accessory device 200 further includes a cover 204 that is connected to the receptacle 202 by a hinge 206. The receptacle 202 includes a sidewall 212 on which the connector 236, or plug, is located. The sidewall 212 may include openings 220a and openings 220b to provide an acoustical pathway for speaker modules and/or microphones (not shown in FIG. 5) of an electronic device. The openings 220a and openings 220b align with the openings 185a and the openings 185b, respectively, of the electronic device 170 (shown in FIG. 3).

[0053] When an electronic device is positioned in the receptacle 202, the connector 236 electrically and mechanically couples to a data port (such as the data port 184, shown in FIG. 3). Also, the accessory device 200 includes a port 238 that can electrically and mechanically connects to a connector of a cable assembly (not shown in FIG. 5). The port 238 is electrically coupled to the connector 236. Accordingly, the connector 236 can transmit, to an electronic device in the receptacle 202, power and data received by the port 238.

[0054] The cover 204 includes a power supply 222 (shown as dotted lines) and a compartment 224 that stores the power supply 222. Further, the accessory device 200 may include a flexible circuit 226 (shown as dotted lines) that electrically connects to the power supply 222 and the connector 236. As shown, the flexible circuit 226 extends from (and is embedded in) the cover 204 into the receptacle 202. The flexible circuit 226 is also embedded in the hinge 206. When an electronic device is positioned in the receptacle 202, the connector 236 is in electrical communication with the electronic device and the power supply 222 can provide energy to charge a power supply of the electronic device (such as the power supply 186 shown in FIG. 3).

[0055] FIG. 6 illustrates a rear isometric view of an embodiment of an accessory device 300 and an electronic device 370 positioned in the accessory device 300, in accordance with some described embodiments. As shown, the accessory device 300 includes a receptacle 302 designed to receive and carry the electronic device 370. The accessory device 300 further includes a cover 304 that is connected to the receptacle 302 by a hinge 306. The cover 304 includes a power supply 322 and a compartment 324 that stores the power supply 322.

[0056] The receptacle 302 may include contacts 328a designed to electrically couple with respective contacts of an external device (not shown in FIG. 6), such as a power supply or external electronic device. In this regard, when the electronic device 370 is positioned in the receptacle 302, the accessory device 300 can receive power and data, via the

contacts 328a, and transmit the power and data to the electronic device 370. Although not shown, the accessory device 300 may include contacts (similar to the contacts 128, shown in FIG. 3) or a connector (similar to the connector 236, shown in FIG. 5), as well as associated circuitry and cables to electrically couple these devices to the power supply 322 and/or the contacts 328a.

[0057] The cover 304 may include contacts 328b designed to electrically couple with respective contacts of an external device (not shown in FIG. 6), such as a power supply. The contacts 328b can be electrically coupled to the power supply 322, and accordingly, the external device can provide energy, via the contacts 328b, to the power supply 322. Although not shown, the accessory device 300 may include a single set of contacts on either the receptacle 302 and/or the cover 304, with the single set of contacts providing all of the functions described for the contacts 328a and the contacts 328b.

[0058] Also, the receptacle 302 includes a wall 308 with an opening 314 for a camera module 394 and a flash module 396 of the electronic device 370. Due to the power supply 322 and the compartment 324 being laterally displaced from the electronic device 370, as shown in FIG. 6, light provided by the flash module 396 is not reflected from an object (not shown in FIG. 6), the image of which being captured by the camera module 394, and onto structural elements of the accessory device 300. As a result, the light is not reflected off the accessory device 300 (including the wall 308), and an image captured by the camera module 394 does not include undesired effects, such as a color or tint of the accessory device 300 applied to the image.

[0059] FIG. 7 illustrates a rear isometric view of an alternate embodiment of an accessory device 400, showing the accessory device 400 with a charging module 442, in accordance with some described embodiments. The accessory device 400 includes a receptacle 402 designed to receive and carry an electronic device (not shown in FIG. 7). The accessory device 400 further includes a cover 404 that is connected to the receptacle 402 by a hinge 406. The cover 404 includes a power supply 422 and a compartment 424 that stores the power supply 422.

[0060] The charging module 442, located on the cover 404, may include an inductive charging module. In this regard, the charging module 442 may include an inductive charging receiver coil designed to receive energy (through electromagnetic or magnetic induction) that is used to charge the power supply 422. Although the charging module 442 is located on the cover 404 of the accessory device 400, in some embodiments (not shown in FIG. 7), the charging module 442 is located on the receptacle 402.

[0061] FIG. 8 illustrates a plan view of an embodiment of an accessory device 500, showing the accessory device 500 with a cover 504 that holds a power supply 522a that is removable from the cover 504, in accordance with some described embodiments. As shown, the accessory device 500 includes a receptacle 502 designed to receive and carry an electronic device (not shown in FIG. 8). The cover 504 is connected to the receptacle 502 by a hinge 506. The cover 504 includes a power supply 522a and a sleeve 532 in which the power supply 522a is positioned.

[0062] The power supply 522a is designed as a removable power supply. In this regard, the power supply 522a may be removed from the accessory device 500 by pulling the power supply 522a out of the sleeve 532. The power supply